SOUTHERN EUROPE'S

CLEANTECHHUB

your best business, our companies

YOUR BEST BUSINESS OUR COMPANIES

:: Cleantech

A place to boost Basque boldness

It is relatively well-known worldwide that the Basques have an entrepreneurial spirit and have historically applied it on a global scale. Despite being a small country surrounded by mountains, rivers and coast, many generations of Basques have been bold enough to travel all over the World, just looking for new opportunities, new spaces to prosper and grow. As a result, America is full of "difficult-to-pronounce" Basque surnames, brave entrepreneurs whose main asset was precisely their ambition and their commitment, leading to the so called "Word of Basque": when doing business, one must always comply with the conditions and fulfill customers' expectations.

New times are no different. Our long commercial and industrial tradition has turned out to be one of our main assets. "Made in the Basque Country" products are acknowledged for their quality and reliability. You can trust a machine manufactured in those grey plants in deep green valleys. The world is also full of examples: railroad cars, wind turbines, solar towers, home appliances, electricity transformer stations and car parts made by Basque industries are success stories for international customers. Stories of confidence in a good job well done.

But where should this boldness be shown in the globalised economy? That is our next challenge. And where we find Cleantech as one of our next routes to success. The powerful research, technology and innovation network built over years in the Basque Country is now being focused on "innovative markets", those where global challenges – sustainability, climate change, social aging, growing health needs, etc. – must be solved through innovative and efficient solutions. Cleantech is an innovative market where Basque strengths – strong entrepreneurial culture, significant public and private R&D spending, competitive industrial capabilities, generation of smooth technology start-ups , dynamic access to financing and, last but not least, a skilled workforce based on the fact that the Basque Country is the third European region in terms of level of university graduates, 43% of the population – which might prove to be a differential value for the worldwide audience.

The goal of Innobasque is for the Basque Country to become an innovation worldclass hub in Europe by 2030. Cleantech represents a strategic lever for reaching this ambitious objective. We truly believe that a value oriented "Cleantech Hub" located in Southern Europe is one of our goals. That's our commitment, and that's why we, together with our powerful partner network, believe in our new Word of Basque: "Your best business, our companies" in Cleantech.

Guillermo Ulacia
President of Innobasque, Basque Innovation Agency

Prof. Anil Markandya
– Scientific Director of BC3
Member of the core team that drafted the IPCC for 4th Assesment awared the Nobel Peace Prize in 2007.

"I have been living in Bilbao since 2008 and during that time I have been the Director of the international research Centre BC3 – Basque Centre for Climate Change, promoted by the Basque Government and the University of the Basque Country. Consolidated academic institutions, mature technological parks, important industrial companies and public institution commitment make this country a very attractive place to develop and invest in high value businesses. There are excellent connections between scientific institutions and companies to develop smart and clean technologies that contribute to the development of the country in this important sector. Example of these links are the 13 sectorial clusters that work towards the same goals. Over the last years the Basque Country has implemented a transformation strategy so that its economic structure is increasingly based on sustainable growth and innovation, with important investments in basic and applied research, talent attraction, network building and results and knowledge transfer to the companies and to the society. The dynamism of this country differentiates it from many European regions and makes a great place to work!"

"As populations grow, standards of living rise, and the scramble for natural resources becomes ever more insistent, companies are increasingly looking to the Cleantech industry to provide incisive solutions to today's sustainability challenges. Nearly 9 billion dollars of venture capital poured into Cleantech last year globally on the premise that the technologies that will reshape the world of tomorrow are being developed all over the world today.

Southern Europe, for millennia known for the warm weather and fertile soil that spur crops to grow, has indeed proved a nurturing environment for "a new crop" of Cleantech companies. Spain, Portugal, and Southern France stand at the powerful intersection of entrepreneurial culture, public sector support, and attention to technological innovation. Moreover, as Southern Europe faces quite different challenges to its more traditionally Cleantech-oriented northern neighbors, the local environment gives rise to a different breed of Cleantech company, taking a fresh approach to emerging issues such as water management and energy efficiency

Consequently, founding a Cleantech hub in Southern Europe will serve an integral role in continuing to propel Cleantech in Europe – and indeed, the world – to the forefront of the marketplace. Some years down the road marketplace observers will doubtless look back on the founding of this hub as a crucial step toward the coalescence of Cleantech as a powerful and mature industry."

David Pearson – Global Cleantech Leader, Deloitte Touche Tohmatsu Limited

"In the next 30 years it is expected that investment in the cities of our planet will be around 350 trillion dollars (7 times world GDP in 2010), and that this investment will focus on Construction, Management and Maintenance of urban infrastructure in the field of housing, economic activity spaces, water, energy, mobility and environmental treatment systems in cities, etc. By twentieth century standards, this investment would be a destructive force for the planet. If, however, Low Carbon concepts and technologies are introduced, this will generate an ecological rejuvenation of our cities and an unprecedented boost for a new green economy.

In this context, Intelligent Urbanism is the main option for ensuring sustainability and economic development. Successful cities combine a Smart City project with the creative implementation of eco-technological solutions. Some cities, like Singapore, which has the best sustainability indicators in Asia, have set the field of Urban Solutions as the top priority of its economy for the coming years, using the city as an experimental laboratory and developing start ups for the creation of new cities in other places. Experiences such as Singapore show that commitment to innovation is the key to the economic transformation of a territory and to discovering new horizons in harmony with a new green economy. In this line too, large international companies in different sectors are reinventing themselves and focusing their strategies on the field of Urban Solutions, through integrated solutions and systems that will improve the quality of life for citizens.

Fundación Metrópoli and Tecnalia have set up the 'Cities Knowledge Platform', an emerging platform for innovation in the Basque Country located within a hub of international knowledge networks whose aim is to accelerate innovation processes of change in the area and help Basque companies to project their brand and experience of the creation of cities and urban solutions of excellence internationally, using Bilbao and the Basque Country as an experimental laboratory for the incubation of technology-based companies."

Alfonso Vegara – President of Fundación Metrópoli, expert in urban housing and author of "Intelligent Territories"

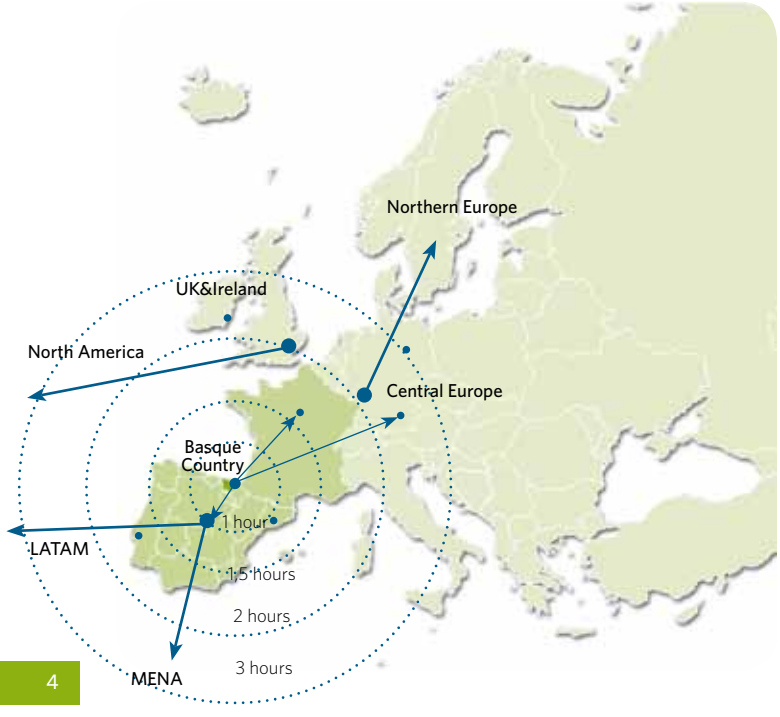
Philip Yeo – Advisory Prime Minister Singapore & Chairman of SingBridge

Clean technologies

A business and employment opportunity for the Basque Country

Despite the crisis situation in developed countries, there is a market niche with strong prospects for wealth creation, capable of creating more than 12,000 jobs up to 2020 in the Basque Country: cleantech, clean technologies, a market whose size is going to multiply threefold worldwide in the next decade. This sector is expected to grow at an average rate of 6.5% per year up to 2020, when it will form a market of 3.1 billion euros that invests 9 billion dollars every year.

To take advantage of this opportunity, the Eco-Innovation transformation dynamic of Innobasque, the Basque Innovation Agency, considers joint innovation by all players that are part of this emerging market related to environmental sustainability necessary, so that the maximum benefit of the reference business and technological elements available in the field of clean technologies in the Basque country is obtained. Consequently, Innobasque and its substantial network of partners are working to position the Basque Country on the global map for clean technologies, those that reduce the negative environmental impact of economic activity by making it more competitive, efficient, sustainable and profitable.



They involve energy technologies (renewables, grid and storage infrastructures and energy consumption efficiency), sustainable mobility, new materials, water and waste recycling and management, biofuels, control of greenhouse gas emissions, sustainable agriculture, etc.

Future prospection analysis indicates that Basque companies are well positioned in some of the technologies which are going to drive the clean technologies market in the coming years, such as energy efficiency and clean energy, sustainable mobility and eco-design in equipment.

The Basque Country, southern europe's cleantech hub

The Global Cleantech Innovation Index 2012, drawn up by the Cleantech Group and WWF, shows that global innovation in this sector is led by Denmark, Israel, Sweden and Finland. These four territories have a quite small population and are relatively small in size when compared with the fifth ranked country, the United States. Moreover, it shows a geographical concentration of this industry in Northern Europe and North America. Therefore, the Basque Country stands as a place with exceptional starting conditions to compete and become the reference pole for clean technologies in Southern Europe. Despite being the best-positioned country in Southern Europe, Spain does have some weak points, which are precisely the strengths of the Basque Country, namely a strong entrepreneurial culture, important R&D&I investment intensity (3% of GDP in 2015) and a solvent financial force, represented by institutions such as Kutxabank or BBVA; venture capital entities such as Seed Capital, Talde, Orza or Ekarpen; without forgetting the funds of large Basque corporations for clean technologies: Iberdrola's Perseo, Gamesa Venture Capital or Repsol Nuevas Energías.

In addition, the Basque Country has a solid industrial fabric with important turnover in Cleantech related companies, increasing consumption of renewable energies, as well as a suitable density of the public sector in this field. Therefore, the Basque Country has the capability to be the leading region in Southern Europe in the development, innovation and commercialization of clean technologies, i.e. Southern Europe's Cleantech Hub.

'Opentric' collaboration model

Moreover, due to the degree of internationalization of its enterprises, the Basque Country could be a gateway to Latin America, the Middle East and Africa, emerging economies with huge domestic markets which are already demanding solutions in energy efficiency, new materials or waste treatment, among others. It is clear that there are different growth niches, for which initiatives are being outlined that exploit Basque strengths so that the territory is an optimal candidate to lead Southern Europe in clean technologies.

To achieve this, Innobasque has followed its own networking-based methodology, Opentric, a model open to all relevant players involved in this field and at the same time focusing on opportunities. To implement this, the Eco-Innovation transformation dynamic is creating a collaboration network among political leaders, public authorities and economic players, as well as representatives of the university, research and technological development world. This has given rise to a committee of experts composed of 19 corporations, prestigious industrial enterprises, R&D centres, investors and technological development support firms: Iberdrola, Gamesa, Repsol, Mondragon Corporación, Idom, Sener, Ormazabal, CAF, Arteche, ZIV, CIE Automotive, Gestamp, Mercedes, Tecnalia, IK4 Research Alliance, Kutxabank, Deloitte, Instituto de Innovación de Ibermática and B+I Strategy. This Committee works in one of the main employment niches with highest potential for the Basque economy, clean technologies, together with investment agents, universities (Mondragon Unibertsitatea, University of Deusto and UPV/EHU) and cutting-edge research centres (CIC Energigune, CIC Biomagune, CIC Microgune, CIC Biogune, CIC Nanogune, BC3 and BCAM).

As a result, the 1st Cleantech Day was held in October 2011, a first step towards positioning the Basque Country as the leading region in clean technologies in Southern Europe or Southern Europe's Cleantech Hub.

What "Southern Europe's Cleantech Hub" is

It is a territory that combines and connects unique factors that facilitate the emergence and growth of innovative business opportunities, in this case related to clean technologies.

In the world

- By 2020 the cleantech market will have doubled and reached 3.1 billion euros.
- This market is growing by between 6.5% and 13% per year.
- Annual venture capital investments: 9 billion dollars.
- Sector led by Denmark, Israel, Nordic countries and North America.

In Europe

- Annual turnover of 319 billion euros.
- 2.5% of European Union GDP.
- Growing at a rate of 8% per year.
- Providing employment for 3.4 million people.
- Venture capital investments of 1.3 billion euros in 2010.

In the Basque Country

- 24.000 green jobs in the Basque Country, mainly in renewable energy, water and wastewater treatment, R&D and professional services (Spanish Sustainability Observatory).
- 1.700 M€ per year (2,6% of total GDP) in the environmental sector (Basque Environmental Industry Association 2010).
- 28% of total R&D&i expenditure deployed to eco-innovation.


CORPORATES & COMPANIES

Iberdrola S.A.

Corporate Venture Capital Program PERSEO

c/ Tomás Redondo, 1 • 28033 Madrid (Spain) • www.iberdrola.es/
Diego Diaz Pilas • perseo@iberdrola.es • +34 915776500069

- Turnover: 31,648M€
- EBITDA: 7,650M€
- Employees: 32809
- Presence in 40 countries
- R&D investment: 136M€
- Available VC funds: 6-9M€/year

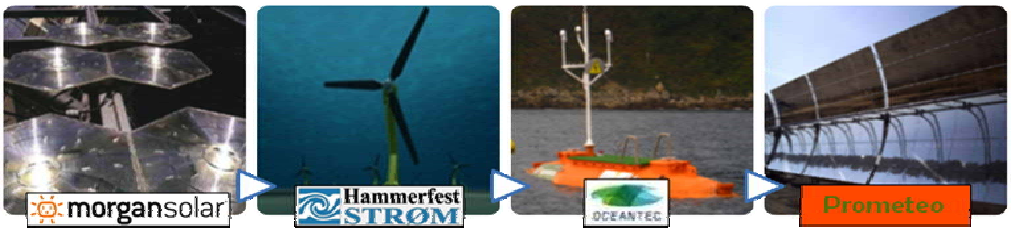
- Iberdrola is one of the world's largest energy companies and global leader in wind power. This has been possible thanks to a solid, long-term industrial project that has created value, founded on a sustainable growth strategy and the efforts of a multicultural workforce of many professionals in several countries.
- Now, Iberdrola works on consolidating the international presence and the development of worldwide grid and renewable energy projects. The main goal is to secure benefits for shareholders, customers, employees, suppliers and the society as a whole.
- The strategy is based on focusing on core business, with short-term investments in mature technologies and mid-term investments on emerging technologies.

PERSEO is Iberdrola´s corporate venture capital program aimed at investing in innovative energy technologies. PERSEO is a disruptive innovation vehicle focused on long-term research and development in areas of great interest for the future of the IBERDROLA Group. Being a large electrical utility company, Iberdrola´s main product is a commodity. Innovating in a commodity involves mostly improving efficiency on the existing processes (mainly incremental and evolutionary innovation). With PERSEO Iberdrola complements its innovation model with a disruptive vehicle for generating new business opportunities for the future core business of the company.

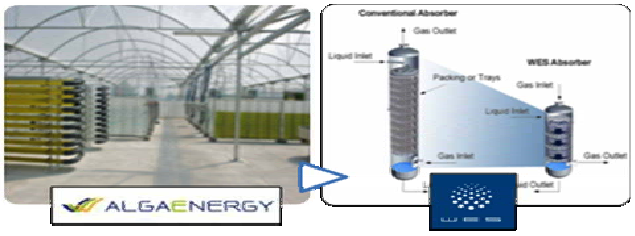
Most relevant VC Cleantech Investments

- Morgan Solar (Canada): Developing innovative technology for concentrating photovoltaic systems (CPV).
- Hammerfest Strom (UK): Tidal power technology based on a turbine system installed on the seabed.
- Prometeo (Spain): Technology for optimization of parabolic-cylinder trough collectors in solar thermal energy (CST).
- Oceantec (Spain): High technology in wave energy capture.
- AlgaEnergy (Spain): Focused on microalgae biotechnology for bioenergy and CO2 capture.
- Westec Environmental Solutions (WES) (USA/UK): Innovative absorber for CO2 capture and other gas separation applications.

Renewable Energy



Emissions Abatement



- Iberdrola is a a major world player in R&D and Innovation in the utility sector (300 M€ for 2008-2010 / 500 M€ for 2011-2014)
- "Iberdrola is committed to research, development and innovation, which are strategic variables for confronting the challenges facing the energy sector". Ignacio S. Galán. President of Iberdrola
- PERSEO: Iberdrola´s Venture Capital Program for Investing in Disruptive Energy Technologies to generate new sustainable core business
- We use venture capital as a tool to ensure the sustainability of our future core investments by building the technology value chain and positioning Iberdrola on it
- According to its strategy of innovation and business excellence, IBERDROLA, together with Basque technology partners and Public Institutions, has set in motion a next-generation smart grid project in Bilbao (Basque Country)

IBERDROLA

GAMESA VENTURE CAPITAL

Bizkaia Science & Technology Park, Building 222 • Zamudio - Basque Country (Spain) • www.gamesacorp.com
• Javier Barcena • jbarcena@gamesacorp.com • +34 944 03 73 52

- Group's Sales: 3,033 Mill€ (almost 92% of whole sales in international markets)
- Group's EBITDA: 364 Mill
- Committed capital for investments: 50 Mill€
- Global geographical scope
- Focus on technology intensive companies

Gamesa is a global technological leader in the wind industry. Its comprehensive response includes the design, manufacture, installation and maintenance of wind turbines, with more than 24,100 MW installed and 16,300 MW under maintenance. Gamesa has 34 production facilities in Europe, the US, China, India and Brazil and 8,300 employees worldwide.

In the search for the new business opportunities and energy solutions that will contribute to sustainable growth in the medium and long term, Gamesa is developing and analysing new technologies and markets as a diversification strategy with the goal of identifying and investing in innovative companies. Gamesa's aim of continuing to grow in the medium and long term requires that it deepen its diversification strategy into new technologies and markets by identifying and investing in new businesses in the areas of renewable energy, energy efficiency and others that offer synergy with Gamesa as a manufacturer of capital goods. To this end, the company's technological diversification strategy in new renewable energies which will enable it to participate actively in alternative sources of growth, capture innovation and complement and capitalise on potential synergies with Gamesa's manufacturing activities. To channel this new strategy, Gamesa has a corporate venture capital fund -Gamesa Venture Capital.

Gamesa is interested in six key technologies around which it will base its research and investment decisions in international markets: wave (converting tidal currents and waves into energy); next generation photovoltaic energy (converting the sun's photonic energy into electricity); small wind (wind energy generated from small- and mid-sized turbines); green mobility (electric vehicles); energy efficiency (maximising energy use while minimising consumption); and off-grid (small renewable generation units that are not connected to power grids, for use in remote locations).

- Gamesa Products and Services: wind turbines, wind farms, construction services, power converters, solar inverters, generators, gearboxes, O&M.

- Venture Capital Investment focus: wind, components, solar, energy efficiency, electric mobility.

Most relevant Cleantech Projects

Gamesa's commitment to the innovation is based on 150 million euro R&D investments planned on Gamesa's 2011-2013 Business Plan. Gamesa's Cleantech R&D projects under way include:

- Azimut Offshore Wind Energy 2020: a large-scale marine wind turbine (15 MW) using 100% Spanish technology.
- Windlider 2015: designing large wind turbines, shortening time to market, and increasing the maturity of the first series to lead the market as of 2015.
- Upwind: designing very large wind generators (8-10 MW), that will be installed in onshore and offshore wind farms.
- Reliawind: enhancing reliability in wind turbine design, O&M with a view to improving efficiency and reducing maintenance costs.

Technology development in wind energy is complemented by the launch of a complementary strategic line of R&D into electricity storage in order to overcome electricity grid limitations that are preventing greater deployment of renewable energies: Sustainergy®, Cars4grid®.

Sound profitability, fully aligned with market guidance, in a highly competitive market:
- Group sales (3,033 MM) and EBIT (131MM) up 10%
- 2,802 MWe in Wind Turbine Generators sold in 2011, up 16%
- 13% increase in order book driven by Latin America (32% of the total), and North Africa with 13%

Although onshore wind construction/operation will remain the industry's core business, wind power flexibility and modularity will translate into new applications (offshore, small wind farms, self consumption, hybrid systems ...)

Gamesa Venture Capital: Investing in Sustainable Growth
- What? Capitalizing on our resources – market position & customers, new product development and an integrated supply chain – to achieve financial and strategic returns.
- How? Providing industrial and financial support to high growth potential and technology intensive early stage companies worldwide
- Main objectives:
  - Build and manage a profitable portfolio of companies with significant synergies with Gamesa.
  - Focus in key sectors: Solar, eMobility, marine energy, energy efficiency, small-wind and offgrid solutions

GAMESA

SENER INGENIERÍA Y SISTEMAS, S.A.

Avenida Zugazarte, 56 • 48930 Getxo - Basque Country (Spain) • www.sener.es •
Borja Zarraga Suarez • borja.zarraga@sener.es • +34944818069

- Turnover: 624 M€
- Employees: 2.270

- Countries where company has delegations:
  - Spain (Bilbao, Madrid, Barcelona, Valencia, Sevilla)
  - Poland (Warsaw)
  - Portugal (Lisbon)
  - USA (San Francisco)
  - Mexico (Mexico DF)
  - Brasil (Sao Paulo)
  - Argentina (Buenos Aires)
  - Abu Dhabi
  - Japan (Okayama)
  - Algier
- R&D investment, 2011 > 20 M€

- SENER Ingeniería y Sistemas, S.A. is an Engineering and Construction Company backed by more than 50 years' experience and belonging to SENER Grupo de Ingeniería, engineering holding leader in Spain and worldwide present.

  SENER is an International leader in:
  - Civil Engineering and Architecture
  - Aerospace Engineering
  - Aeronautics and Vehicles
  - Actuator and Control Systems
  - Power and Process Plants
  - Marine Engineering

  The Power and Process Business Unit includes Engineering and EPC solutions for renewable power (thermosolar, hydro, biomass, marine energy) and environmental related plants (waste to energy, pig manure treatment, waste oil re-refining plants).

  Those technologies rely on patented and licensed solutions by SENER. SENER faces challenges and ambitious opportunities where technical value is added, sourced on our own technological developments and based on high efficiency and environmentally-friendly technology.

- SENER is a worldwide company, where more than 2,500 professionals and 13 offices. Our wide portfolio, large backgroung experience in the enginnering and capacbilities in EPC construction give value to our clients and partners.

- Positioning/ Interest in the subsector (clean & efficient energy, sustainable mobility or ecodesign in equipments): Being SENER one of the largest agents in environmentally related projects (thermosolar, biomass, waste to energy, hydro, pig manure, marine, etc.), we believe CLEANTECH is a suitable forum to show our background and look for synergies with possible partners and/or clients in the Renewables and Environmentally related sector.

Most relevant Cleantech Projects

GEMASOLAR CENTRAL RECEIVER THERMOSOLAR POWER PLANT (Fuentes de Andalucía, Seville, Spain)
19.9 MWe thermosolar power plant with 120 MW thmolten salt centralreceiver
PARTNERS: Cobra

CSP THERMOSOLAR POWER PLANTS (Spain)
More than 15 CSP plants in Spain with Parabolic Trough Technology, each 50 MWe
Investment over 200 M€ each
Examples: ANDASOL, TERMOSOL, TERMESOL, VALLESOL, SAMCA plants

ZABALGARBI. Bilbao-Biscay, Spain
Waste to energy plant (net power = 94 MW)
Net global efficiency = 42%
PARTNERS: CNIM

WASTE OIL RE-REFINING PLANT (Fuenlabrada, Madrid)
26,000 t/year processing capacity
Patented by SENER

NOx REDUCTION IN CONVENTIONAL THERMAL PLANTS OF ENDESA

SULPHUR DECREASE UNIT FOR LA ROBLA POWER PLANT (Spain)

PIG MANURE TREATMENT PLANTS (Toledo and Juneda - Lerida, Spain)
Pig manure efficient treatment plants (100,000t/year each), including 16 MWe cogeneration (gas + biogas motors) for manure drying (up to effluents=0). Capacity of the plant: 400 Nm3/h biogas + 6,500 t/year fertilizer. Process (VALPUREN) patented by SENER
SCOPE: Basic Engineering, Detail Engineering EPC execution

SENER is a leading company in the renewable and environmentally related projects. Our background in engineering and EPC construction is a basis for our leading presence in the Clean Technology areas. The world needs renewable energy, linked to two priorities:

a) the highest available efficiency. The BAT (Best Available Technologies) should be complemented with the HEAT (Highest Efficiency Available Technologies)
b) the R&D for new solutions: Power storage systems, new Thermosolar designs, use of molten salts and other high performance fluids, high efficiency Biomass, Marine offshore power (waves), High Efficiency Waste to Energy are nowadays.

In the actual economic scenario in Europe, the development of these areas is a chance for our countries to become the world leaders in environmenta technology, implementing solutions first in Europe that afterwards can be exported to other areas in the world.

Recently nominated for the European Business Awards for the Gemasolar concentrated solar power project.

SENER INGENIERIA Y SISTEMAS

MONDRAGON Corporation

Paseo José María Arizmendiarrieta, 5 • 20500 Arrasate-Mondragón - Basque Country (Spain) • www.mondragon-corporation.com
Eduardo Beltrán de Nanclares (Innovation & Technology Director) • ebeltran@mondragoncorporation.com
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- It's organised into 4 areas: Industry, Finance, Retail and Knowledge.
- It has its own Innovation, Promotion and Knowledge System:
  - 14 technological centres and R+D business units.
  - Mondragon University.
  - Promotion & Business Acceleration Center + 2 Innovation Poles (Garaia and Galarreta).
- Turnover*: 14.002 M€ (Industry & Retail Areas)
- Employees*: 82,3 thousands
- Countries: 9 corporate offices and 93 production plants spread across the world
- R&D investment*: 162 M€

* 2011 provisional date.

- MONDRAGON Corporation is a relevant global corporation, highly diversified, with strategic interest in clean technologies and with research, development and investment capacities.

Among its strategic decisions, emphasizes the generation of new Cleantech businesses and technologies, through 2 ways: incorporating clean technologies in current sectors (Automotive, Capital Goods, Construction, Domestic Appliances and Lift) and developing new businesses in new sectors:

- Capital goods for renewable energies: Manufacture and assembly of conventional photovoltaic solar panels and thin film (Mondragon Assembly) and equipment for the manufacture of wind generators (Danobat Group).
- Development of a household micro-CHP system that uses a Stirling engine. It operates as a mini power-station which provides heat, hot water and electricity for the home (EHE).
- Integrated solar collector for hot water production (Orkli–Soterna).
- Development of a range of echo - engine Range Extender for hybrid vehicle with the electrical generator and the investor incorporated (Fagor Ederlan and Fagor Automation). MONDRAGON Corporation is also working on new concepts around the electric car.
- Efficient Rehabilitation to restore existing buildings, giving priority to sustainability, energy efficiency and economic profitability of investments (LKS Ingeniería).

Smart Home Appliances

- Comprehensive service for the collection of used cooking oil. The main objective is to reduce, reuse and recycle oil waste by turning it into biodiesel or other new products (eko3r).
- Sludge, from the cleaning of waste water and industrial activities such as food processing, livestock and paper, treatment solutions (Edergarden).
- Environmental consulting: design, management, implantation and maintenance in the frame of management of environment and sustainability. Technical services of engineering and environmental remediation, etc (Ondoan).

- Mondragon Corporation has interest in going more deeply into various subsectors such as: Clean & Efficient Energy, Sustainable Mobility, Waste Water Treatment, Climate Change & Sustainable Development (including Ecodesign in equipments, Recycling and Energy Efficiency in Buildings, Districts and Industrial Processes) and Smart Grids.

Range Extender

"All in one" integrated solar collector

Cooking oil collector

- MONDRAGON CORPORATION is a worldwide leader in "Ecodesign of Equipments"
- Innovation is driven by an own promotion, knowledge and technology system endowed by more than 160 M€ yearly, 15% of it related to eco-innovation.
- Sustainability and Excellence is fully incorporated in the Corporation Management Model pushing values of quality reliability, innovation and environmental care.
- MONDRAGON is driving Cleantech in 'Ecodesign' locally and internationally leading European level certification (ISO 14006) and best in class initiatives like the Basque ecodesign center.

MONDRAGON CORPORATION

CIE Automotive

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Jose Esmoris • jmesmoris@cieautomotive.com • Tel. 94 605 62 00 • Fax.94 656 49 57

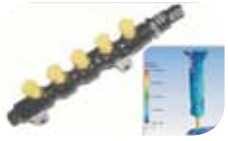
- Turnover: 1.840 M€
- Ebitda: 234,1 M€
- Employees: 14.335
- Countries: 17
- R&D investment: aprox 2,2% of turnover: 40 M€

- CIE Automotive is an industrial group specialised in managing high-value-added processes, based on multi-technology. The engineering capabilities offer an optimization from design to production focusing on cost, performance and weight.
- Continues improvement on components focusing on:
  - Consumption reduction on production.
  - Weight and emission reduction.
  - Contaminant elements reduction.
- Our interest on Clean Tech is to open our market to different sectors focusing on Ecodesign. Learn from other and offer our experience on multitechnolgy.

Cleantech Projects

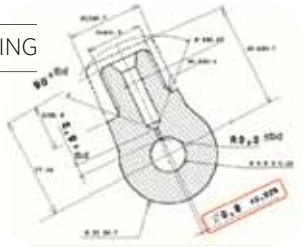
- SPHERICAL & LONGITUDINAL COMMON RAIL PRECISION MACHINING

Spherical Common Rail



Longitudinal Common Rail

Drilling tool 0,8mm diameter



Precision Machining

Tooling

Benefits

- The Spherical common Rail is possible to be adapted in actual engines without common rail with small modifications
- Reduction of CO_2 emissions.
- Improve engine efficiency.
- Weight reduction opportunity.
- The spherical common rail is possible to be adapted in actual engines with small modifications.
- Cost saving opportunity.

• RHEOCASTING (SEED)

The first stage...

Moleten aluminium of the desired composition and temperature is transferred to a vessel and primary solid phases start to form as a result of heat (enthalpy) exchange.

- The vessel and its content are swirled with an eccentricity.
- The swirling motion ensures the uniform distribution of primary solid phase.
- The duration depends upon the dimensions of the vessel and mass of the charge.
- The solid fraction at he end of this stage is typically 35 to 40%.

The second stage

After a brief pause of 5 to 10 seconds, a valve opens and some liquid phase is allowed to drein.

- This typically takes from between 30 to 45 seconds.
- Depending upon the processing conditions, the liquid drained may range from 5% to 10%.
- During this stage the slurry contracts to form a freestanting semisolid slug.

The third stage...

- The slug is de-moulded from the vessel and easily formed into a desirable shape.
- Uniform consistency and a microstructure free of the trapped islands of eutectic.

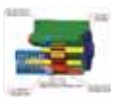
Bracket Paulstra

Benefits

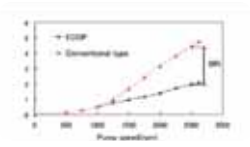
- Heat treatment flexibility.
- Wide range of materials.
- Complex geometry and flexibility.
- Near net shape.
- Weight reduction.
- Machining reduction or even avoidance.

• VARIABLE FLOW OIL PUMPS

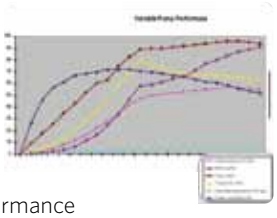
Conventional Pump



Sliding Gear Pump



Performance Comparison with Electric Control Oil Pump and Convetional Type



Performance

Fatigue Bench & Development Capalities

Benefits

- Less fuel consumption.
- Enhance engine performance.
- CO_2 emissions reduction.
- Possibility of different levels of regulation.

IDOM Engineering, Architecture and Consulting

Zarandoa 23 • City, Postal Code: 48015 Bilbao - Basque Country (Spain) • www.idom.com
Rafael Sagarduy Careaga • rsagarduy@idom.com • 944 797 600 • Fax: 944 761 804

- Turnover: 300 M€
- Innovation & Trainning: 15 M€
- Employees: 2500
- Countries: 16 (119 countries with projects)

IDOM is a business group providing engineering, architecture and consulting services. The company is always at the forefront in the demanding market of Industry and Energy, looking for the most efficient, reliable, sustainable and safety solutions for his clients. In the field of Cleantech technologies and services, they offer a large variety of solutions in different areas:

- Water (potabilization, desalination, industrial and residual water treatment, sanitation systems)
- Waste Management (treatment plants, waste management plans)
- Air (emissions treatment, air quality planning)
- Advanced behaviour analysis of new materials
- Climate Change (CDM projects, carbon footprint analysis, mitigation and adaptation)
- Solar energy (thermal and photovoltaic plants)
- Wind energy (on shore and off shore wind farms)
- Other renewable energies
- Energy savings and efficiency (Combined cycle and cogeneration plants)
- Eco-efficiency projects
- Transport and mobility (Rail infrastructure, ports, airports)
- Building and town planning (Urban master plans and sustainable architecture projects)

DELOITTE

Ercilla, 24 • 48011 Bilbao - Basque Country (Spain) • +34 94 444 7000 • www.deloitte.es
José María Grande • jgrande@deloitte.es • Gabriel Pérez Urrutia • gperezurrutia@deloitte.es

- Turnover: Spain, 459 M€; Global, 28.8 billion dollars
- Employees: Spain, 4.465 people in 20 offices; Global, 182.000 employees.
- 153 Countries

Deloitte is the leading professional services company in Spain. It bases its leadership on the of its professionals' knowledge and on its client service approach in all its service lines.

Deloitte is the main provider of audit, tax advisory, consulting and financial advisory services to Clean Tech companies on a global scale. Deloitte has created a new global network to fulfil the needs of the Clean Tech–related companies, both at a local and a global level; this professional global network is specialized in advising corporations, governments and institutions from a macroeconomic sustainability and social responsibility perspective.

Additionally, Deloitte collaborates internationally with different associations and initiatives related to the Clean Tech and Renewable Energies sector. In this regard, as a consequence of several agreements and of our deep knowledge of the sector, Deloitte develops a profound investigation and publication activity in the field of Clean Tech.

Cleantech Partners

Cleantech Group (top supporter); New England Clean Energy Conference; New Energy Finance (UK); Bay Area Council; Joint Venture Silicon Valley; MIT Ignite Clean Energy Competition (ICE); China SF (China-San Francisco economic development initiative).

Most relevant Cleantech Projects

Seven core service offerings: Sustainability and Climate Change Strategy; Energy and Natural Resource Management; Sustainable Operations and Supply Chain; Sustainability Reporting, Assurance, and Compliance; Sustainability Governance and Risk Intelligence; Human Capital and Stakeholder Engagement; IT for Sustainability.

- Turnover: 1.725,10 M€
- EBITDA: 228,84 M€
- Employees: 6.952
- Countries: 15
- R&D investment: 11,06 M€

CAF

J.M.Iturrioz, 26 • 20200 Beasain - Basque Country (Spain) • www.caf.net
Jon Huete • Corporate Development • jhuete@caf.net • +34 943.88.01.00

CAF's product range covers from complete transportation systems (High Speed, Locomotives, Regional trains, Commuter trains / Electric Motorcars, Metro Units Trains, Streetcars and Light Rail Trains) and Turnkey Solutions, to custom-made parts and components.

The transport sector is tackling the serious challenge of providing transport solutions that respect the natural environment, and respond to the progressive global demand for modern and comfortable transport networks.

CAF believes that the environment is one of the key factors in their company strategy. In their strict commitment to sustainable development, CAF provides new solutions offering more efficient and environmentally friendly means of transport. In the design process, CAF applies the state-of-art in the analysis and simulation tools and testing systems, to define and configure the optimal values of each train, minimizing energy consumption, improving operations in the use phase, and extending the lifetime on service: braking energy recovery and storage, reduction of auxiliary systems consumption, energy savings optimized methods, lighter and more recyclable materials, free of noise and vibrations trains, efficient driving systems.
On route to a sustainable future we are making balanced progress: clean, ecological and emission free.
CAF is an industrial base company that believes in innovation and technology, and as such, is always open to projects in the transportation and related sectors as well as other industrial or technological projects in different sectors.

Most relevant Cleantech Projects

- ecoTRANS (CENIT), a project headed by CAF whose main purpose is to develop technologies required to provide passengers with more appealing public urban transport (comfortable, punctual, fast, safe, reliable) with less environmental impact (low energy consumption, low visual impact, low noise impact).
- ACR: Catenary-less LRV CAF solution. CAF has developed an on-board train energy storage system, which accumulates braking energy, permitting the elimination of electrical wiring between stops. The Rapid Charge Accumulator (ACR) is CAF's state of the art solution for the catenary-free LRV.
  This groundbreaking technology will contribute to improved integration of urban transport in the cities, reducing visual impact in heritage areas and increasing energy efficiency.
- AVI 2015 (CENIT): High Speed with less energy consumption. Applying sustainable technologies to the new interoperable trains reduces energy by 10%

- Annual income: 1.555 M€ €
- EBITDA: 328 M€
- Employees: 7.956

KUTXABANK

Gran Vía, 30 • 48009 BILBAO - Basque Country (Spain) • www.kutxabank.es
Maite Lozano • mlozanoj@bbk.es • 944017308 • Fax 944017957

At Kutxabank, as a financial institution, we support the development of clean technologies through our equity holding in the capital of companies committed to the development of renewable energies and energy infrastructures.

The 8th financial institution in Spain

IK4 RESEARCH ALLIANCE

Pol. Azitain 3K, 2ºG • 20600 Eibar - Basque Country (Spain) • www.ik4.es
Oscar Salas • salas@gaiker.es • +34943820350

- Turnover: 102.3 M€
- Employees: 1.405
- R&D investment: 23.6 M€
- Available VC funds: 1 M€

We are an alliance of 9 private non-profit Research Centres whose mission is the generation, uptake and transfer of scientific-technological knowledge. This way we contribute to the improvement of competitiveness of the industrial environment.

The aim of the Alliance itself is to increase our global capabilities and effectiveness, by promoting a synergic stable and long term collaboration framework between the Centres.

This allows us to reach the necessary critical mass to undertake more challenging or multidisciplinary projects, providing a more complete and attractive technological offer for almost any industrial sector.

IK4 is a reference entity providing cleantech solutions. We gather a huge experience and capabilities developing innovative solutions for, i.e., environment, recycling, energy, transport & mobility industries. Efficiency and sustainability are two keystones in every project we participate, as essential factors to be considered.

We have the knowledge, experience and capabilities to develop any product, process or service fully compliant with the most demanding cleantech requirements worldwide.

Some relevant Cleantech Projects

- "Basque Country Buildings Energetic Certification Procedure", developed for the Basque Country Energy Agency (EVE – CADEM), Spain.
- "Critic Elements Lubrication. BioLubricants development and in-use control, on-line sensorics and life cycle estimation". Spain.
- "Optimization of WWTP sludge digestion processes, for improvement of their performance and the quality of the produced biosolids". Spain
- "GLICOPLAST: PET and PU plastics waste chemical recycling by depolimerization through glycolysis". Spain
- "SISBIO: domestic heating and DHW system with three renewable sources (heat pump, solar field and multibiofuels boiler)". Spain

ZIV APLICACIONES Y TECNOLOGÍA, S.L.

Parque Tecnologico, 210 • 48170 Zamudio - Basque Country (Spain) • www.ziv.es
Angel Orcajada • a.orcajada@ziv.es • +34-944-522003

- Sales: 56 M€
- Ebitda: 6 M€
- Employees: 400
- Foreign delegations: U.S.A., BRAZIL, U.A.E., RUSSIA and SINGAPORE
- Direct R&D investment: 6M€/year (roughly same figure in 2008-2011)

ZIV designs, manufactures and markets "Digital Protection, Control, Metering and Communications Equipment/Systems "for HV and MV electric power networks and industrial applications"

Since 2011, ZIV has been structured in 4 independent companies focusing on specific market niches:
- ZIV GRID AUTOMATION: Protection + Control and Electrical Engineering Services
- ZIV METERING SOLUTIONS: Smart meters, AMM and Electric Vehicle recharging systems.
- ZIV COMMUNICATIONS: PLC, Networking, Fiber Optics, Teleprotection and coupling devices
- ZIV R&D: Non-profit organization to support research activities for the whole group

- Turnover: 116 M€€
- Cash-Flow: 9 M€
- Employees: 1500
- Countries: 22
- R&D investment: 116 M€ total, 47 M€ clean

TECNALIA

Parque Tecnológico San Sebastián-Mikeletegi Pasalekua, 2
20009 San Sebastián - Basque Country (Spain) • www.tecnalia.com
Javier Garcia Tejedor • Javier.garcia-tejedor@tecnalia.com • +34 946 430 850

- TECNALIA Research & Innovation is the first private applied research & technology organisation in Spain and the 5th R&D corporation in Europe. We work in wide range of products, services and processes related to providing higher performance at lower costs in order to reduce or eliminate the negative ecological impact, and to improve the responsible use of natural resources. Sustainability is at the forefront of our activities. We do research to overcome humanity´s challenges in Urban-Territorial Sustainability, Urban Environment and Environment, and Climate Change.

  The future energy system is one of our focus areas including smart electricity networks, electrical mobility, energy storage, marine energy, solar energy, bio-fuels.

  The Urban Environment is another focus area covering from the emerging medium sized smart cities, to the new building concepts related to energy efficiency, their adaptability to use changes (due to aging population), promoting the Smart and Sustainable Buildings. Urban regeneration is dealt as well as the whole value chain of construction products, or the water cycle. In this sense, we develop nanotechnology-based products as a way to the reduction of the products carbon foot-print and the embedded energy. Biodegradable products, their production from waste materials or their recycling are also treated.

- Our best asset is our team, made up of more than 1,500 experts who work to transform knowledge into GDP in order to improve people´s quality of live by generating business opportunities for companies. TECNALIA has a business model that allocates 50% of its resources to developing technological solutions, patents and business opportunities that are transferred to industry. Of these, approximately 40% are dedicated to clean technologies. Tecnalia also transfers its business opportunities in the form of spin-offs in collaboration with other companies or investors.

Most relevant Cleantech Projects

ECOCONCRETE – Ecological concrete
WINDFOREST – Urban Windturbine
PHOTOTER – Thermodynamic-photovoltaic hybrid system
AEROCOINS – New superinsulating materials
IRCOW – High grade material recovery from demolition
MARINET – Offshore renewable energies

Product and services catalog

- Digital Protection and Control equipment for Transmission, Distribution and Industrial Applications
- Substation Automation
- Multi-function and Multi-energy Digital Meters y (classes 0.2S, 0.5S, 1 and 2)
- Metering Data Reading, Acquisition and Billing Software (ZIV-TPL, ZIVERLEC and ZIVERPAY)Z
- Wireless Networking for Industrial and electrical environments
- Automatic Meter Management Systems
- Substation Central Units
- Communication and Configuration programs and Software tools (ZIVERCOM; ZIVERLOG, ZIVERTOOLS and some others)
- Inductive and capacitive coupling devices (carrier injection)
- Smart Grids

Areas of Knowledge

- Power Electrical Systems
  - Protection
  - Control
  - Metering
  - Communications
- Microprocessors and Microcontrollers
- Analog and Digital Electronics
- Digital Signal Processing (DSP)
- Industrial Software Control Process
- Communications Software
- System Integration Software
- Information Technologies
- PLC (Power Line Communication)
- Power electronics

Cleantech Partners

Iberdrola

Most relevant Cleantech Projects

Bidelek Sareak (Spain, Basque Country): smart grids project lead by Iberdrola


ENTREPENEURS

TOP20CLEANTECHINNOVATORS

Entrepeneur	Web	Cleantech sector
AB Laboratorios	www.ab-laboratorios.com	Biomaterials
Alpetek	www.tecnalia.com	Recycling & Waste
Ametslab	www.ametslab.com	Energy Efficiency
Bidatek	www.bidatek.com	Wastewater
ECOMOTION	www.ikei.es	Transportation
Efficient Home Energy	www.ehe.eu	Microcogeneration
EKIHOUSE	www.ekihouse.org	Energy Efficiency & Solar
Power Track	www.powertrackcvp.com	Energy Infrastructure
Gese	www.gese.es	Energy Efficiency
Dexma	www.dexmatech.com	ICT for efficiency
HBiO	www.hbio.com	Wastewater
Ingeinnova	www.ingeinnova.com	Energy Infrastructure & Other
Kera Coat	www.kera-coat.com	Materials
Luix	www.iluminacionluix.com	Energy Efficiency
Optimitive	www.optimitive.com	ICT for efficiency
STRI	www.stri.biz	Energy Efficiency
Sustainable Reference	www.sustpro.com	ICT
EKIONA	www.ekiona.com	Energy Efficiency
Urban Intelligent	www.urbanintelligent.com	Energy Efficiency
Wattiocorp	www.wattio.com	Energy Efficiency

The following 6 startups have put themselves as candidates for the Entrepreneur Showcase sessions at Cleantech Forum Europe 2012. Bidatek and HBiO have been selected to present from a large pool of applicants to pitch their investment opportunity amongst 15 finalists.

BIDATEK S.L.

Portuetxe nº23A Of 307-IV • 20018 San Sebastián - Basque Country (Spain)
www.bidatek.com • www.biofiltro.cl
Borja Vallina Conde • bvallina@bidatek.com • (+34) 943 32 61 91

BIDATEK is the main company of a group compound of three companies, BIDATEK Ingeniería Ambiental S.L. (Spain), BIDATEK Projetos e Serviços Ambientais Ltda. (Brazil) and BIOFILTRO Ltda. (Chile).

BIDATEK offers a technology sustainable and a green way solution for the waste water. It offers a complete system to treat domestic and industrial effluents. It offers a simple, robust and cost-effective means of wastewater treatment. It has a unique and not expensive technology that transforms a problem (organic residues) in a solution (organic fertilizer).

It develops its own waste water treatment technology. While traditional technologies concentrate the pollution of the water in an unstable mud, that then it needs to treat "in-situ" or transport to authorized place to deposit it. BIDATEK technologies treat the wasted water and transform the pollution in a natural fertilizer, called "humus", because part of this depuration is made by earthworms.

The benefits of Bidatek technology are:

- Low running costs (manpower, electric energy, maintenance)
- Not generate unstable mud
- Not needs mechanical aerations
- Chemistry free
- Easily operated
- Not require skilled staff like an engineer
- Total environmental respect
- Not generate bad smells and greenhouse gases
- Not generate noise
- Very low quantity of electric power.
- In resume total environmental respect!

HBIO RETO XXI S.L.

María Díaz de Haro 68 • 48920 Portugalete - Basque Country (Spain) • www.hbio.es
Gorka Retolaza • hbio@hbio.es • (+34) 671 096 345 • (+34) 946 014 820

HBiO offers the opportunity of grey water onsite reuse reducing this way up 50% water consumption, using a technology treatment that integrates three steps on the same equipment.

The technology used, protects the ultrafiltration membranes without any electronic instrument and is the only one that includes water quality measurement and on line control (24h/day control).

HBiO technology is compact, modular and guaranties water quality with very low investment as well as having several advantages over his competitors:

It is designed for the international market; controls the water quality constantly, to guarantee the best water supply; If any parameter is over tolerance or any error is detected, the system automatically stops and starts the potable water supply; offers on-line and personal maintenance; systems are designed to occupy the smallest area possible.

ENTREPRENEURS

URBAN INTELLIGENT

Ctra. Bilbao-Galdakao, nº 10, 2ª planta, módulo 5 • 48004 Bilbao - Basque Country (Spain)• www.urbanintelligent.com
Luis Castells Reyes • lcastells@urbanintelligent.com • +34 669 476 551

Urban Intelligent has developed and produces its own wireless devices to connect, in a mesh-networking, people with machines through the cloud. This patented system allows, in real time, to control and monitor the behavior of any infrastructure, opened space and obviously Smart Cities, interacting with wireless sensors for any purpose, such as Signal Noise in the population, Noise pollution, Traffic Control, Control of parking, Pollution Control (Co), Solar radiation control, Control of weather elements etc.

This patented system allows controlling outdoor lighting by wireless system. The devices are completely flexible and adaptable to any other firms of the market, making completely adaptable and integrating with any of elements already installed, while the rest of competitors just can go ahead in the market with their own products.

OPTIMITIVE, S.L.

Albert Einstein, 15 (CEIA Building) • 01510 Miñano - Basque Country (Spain) • www.optimitive.com
Javier A. García Sedano • javierg@optimitive.com
(+34) 945 29 81 20/(+34) 945 29 87 10

Advanced IT solutions for energy efficiency and optimization of industrial processes, based on own products. Typical savings of 3-10% and benefits for the customer from the first month. The main product of the company is OPTIBAT®, based on Artificial Intelligence. OPTIBAT® makes on-line adjustments in process setpoints in order to make it produce with the best possible performance under changing conditions. Power plants, refineries, cogeneration, furnaces, paper machines and more, can be optimized.

OPTIBAT® allows implementing complex optimization and operation strategies in many different industrial processes. It is a robust and safe solution for processes in which exceptions, anomalies, instabilities or unforeseen working conditions are part of the daily work. Customers can achieve huge savings in the energy invoice in a short time.

WATTIO

Mikeletegi 54, local 15 • 20009 San Sebastián - Basque Country (Spain) • www.wattio.com
Patxi Echeveste • patxi@wattio.com • +34943309588/+34943000990

Wattio is a company that develops, manufactures and sells a technologycal platform for Smart Homes. Wattio is seeking opportunities and partners to deliver his solution to homeowners.

Wattio's competitive advantages are the following:

- Market knowledge: Already working with a major Utility.
- Know-how of all of the technologies involved in the solution. We do hardware, firmware, software.
- Control and flexibility of the whole solution.
- Short development periods for new products and tailored solutions.
- Know-How = Security oriented.
- Other services beyond energy efficiency, comfort, security and health. This is a main issue, because the same system will give more solutions to the users and, what is more more important, with a tool they already know how to use.
- Lower prices as Wattio participates in the whole solution.

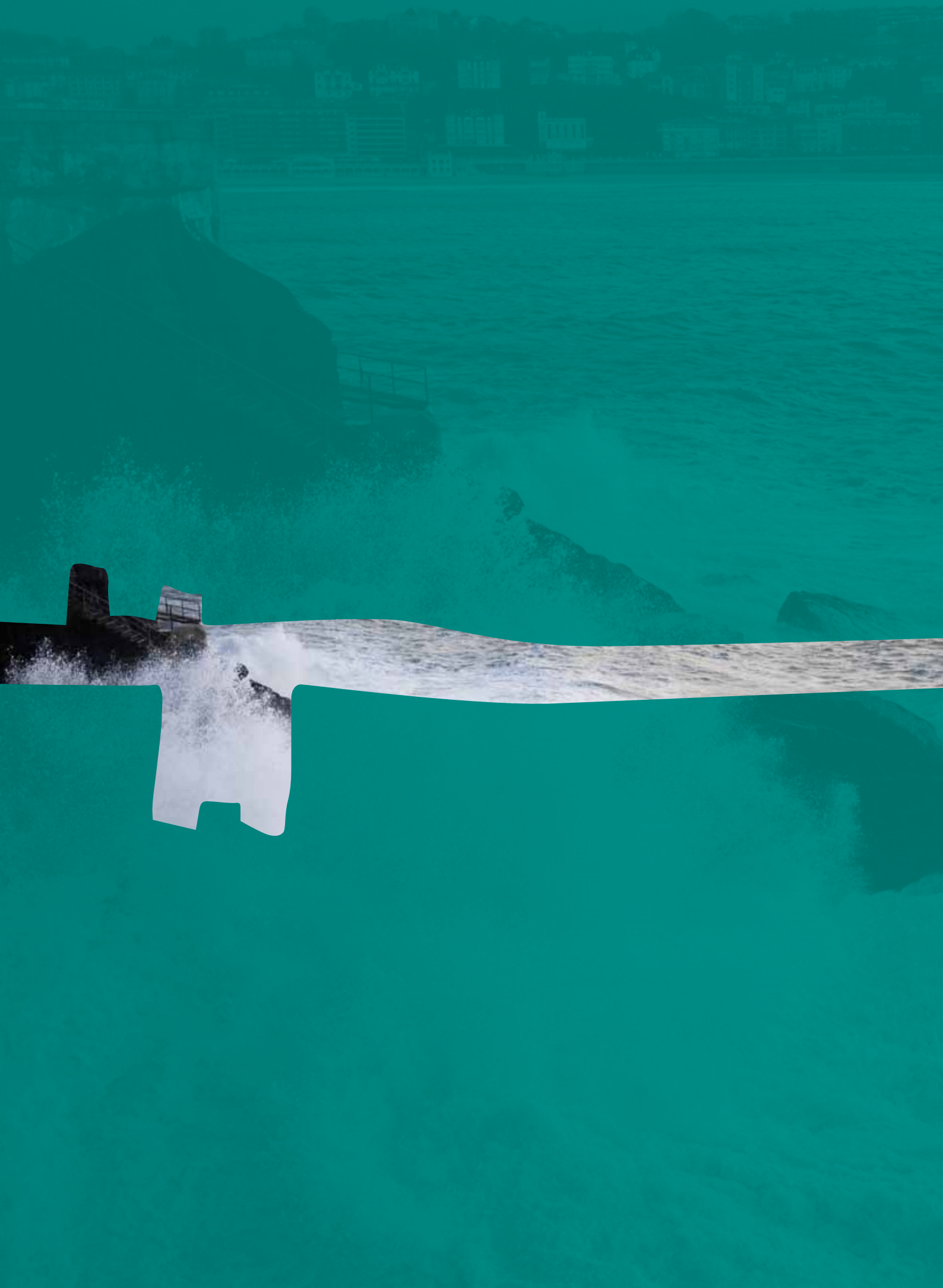
GESE

ENERGY SERVICES

c/ Estraunza nº 5, bajo • 48011 Bilbao - Basque Country (Spain) • www.gese.es
Aritza Menchaca • amenchaca@gese.es • (+34) 94 439 9456 • (+34) 94 439 9456

GESE promotes Energy Efficiency investments at Manufacturing and Services companies, integrating the most adequate technology and the Financial Resources that transform Energy Cost Savings into Energy Services Companies (ESCOs) with proven solvency and profitability. GESE is developing its own software and algorithms to continuously improve and benchmark Energy Costs for our customers, be through the optimization of the quantity used (Q) and/or through the improvement in the prices or utility tariff structure (P).

In terms of Technology, the application and algorithms that are being developed integrate hundred of variables and continuously propose recommendations to improve Energy Efficiency and reduce costs and CO_2 emissions. These Competitive advantages have enabled the Company to have more than 1 Mio euros in the project pipeline in less than 3 months from incorporation. The application is fed with: technical information (that reads the behaviour of the installations), Financial information from utility supplier, Technological options to replace current technologies, Prices, Utility Tariffs, Benchmarks from other users etc., and combining all these data sources amongst many others, continuously proposes areas for improvement. In addition to this, the ESCOs integrate Utilities, Maintenance Companies, Energy Efficiency Optimization Software, Tecnology Providers and Funding to maximize ROI.




SME SHOWCASE

EFFICIENT HOME ENERGY (EHE)

Poligono Arzabalza Edificio 3, planta 2, local 64 • 20400 Tolosa - Basque Country (Spain)
www.whispergen-europe.com
Jochen Henn • jhenn@ehe.eu • 0034 943 65 24 90

Efficient Home Energy is a joint venture between Mondragon Cooperative Corporation, one of the largest industrial groups in Spain and Meridian, the New Zealand government owned utility. Efficient Home Energy is specialized in the manufacturing of micro-cogeneration devices.

Micro-cogeneration is a technology that – from our perspective – will play an important role in smart grids since it is a new decentralized and efficient way of generating energy. Efficient Home Energy´s vision is to develop solutions for the residential market in order to help households make a better use of primary energy bringing benefits such as independence, savings in energy bills and lowering CO2 emissions.

Efficient Home Energy with Mondragon´s and Meridian technological and financial backup is prepared to develop innovative solutions to make micro-cogeneration an important player in the field of decentralized generation.

Fagor Ederlan Group

Torrebaso Pasealekua • 20009 Eskoriatza - Basque Country (Spain) • www.fagorederlan.es
Miguel Mateo, Commercial Director Range Extender • m.mateo@fagorederlan.es • 665733755

Fagor Ederlan Group is a cooperative business group, with a clear of vocation service , working as global solution supplier for chassis and powertrains for major vehicle manufacturers of the world.

Our value proposal to the market comes from innovation in response to latest challenges the sector is facing, We are experts, no other manufacturer can offer so extensive a range of product for both Chassis and Powertrain. We control materials, technology and process to drive highest added value proposal to the global automotive markets. Capabilities and competences in engine and future powertrain technologies of Fagor Ederlan Group have been reflected in their recent joint collaboration in the development of "range extender" product family with Lotus Engineering.

The proposal integrates a combustion engine and an electric generator and has been designed specifically for extended range electric vehicle applications, being extremely compact, lightweight and competitive. Its greatest contribution is that it allows the batteries of any electric vehicle equipped with the Range Extender to be charged on the move and, as a result, increasing their autonomy.

ORKLI, S. Coop.

Ctra. Zaldibia, s/n • E-20240 Ordizia - Basque Country (Spain) • www.orkli.com
Joaquín García, Innovation & Management Systems Director • solarorkli@orkli.es • 902 19 47 55

Orkli is a company engaged in the manufacture and sale of components for central heating, domestic hot water, water heating and domestic appliances. Its headquarters are located in Ordizia (Gipuzkoa) and its market/customer-oriented organisational structure is based on three business units:

- Heating and plumbing: Control and regulation systems for air and water temperatures in Heating and plumbing installations in the wholesale, dealers and warehouses for heating and plumbing installers sector.
- Thermoelectric safety: Ignition and flame control, gas regulation and safety systems for manufacturers in the domestic appliance sector.
- Water Heating: Water and gas regulation systems in water heating appliances in the home for manufacturers and water heaters and boilers in the domestic appliance sector.

Its dynamism in social, business and innovative terms is clear from the recent launch onto the market of the "Lurbero" brand underfloor heating system and the incorporation into its range of solutions for Thermal Solar Energy powered central heating systems.

SME SHOWCASE

A&B Laboratorios de Biotecnología S.A.U.

c/Paduleta, esquina c/Júndiz - Parque Industrial de Júndiz • 01015 Vitoria - Basque Country (Spain) • www.ab-laboratorios.com
Iker Rodriguez -Export Manager- • iker@ab-laboratorios.com
Tel: 0034 945291616 • Fax: 0034 945292939

Spanish company specialized in research, develop and manufacture of innovative products with biological properties, including materials as microorganisms and enzymes as alternative to the traditional chemicals. The products are mainly focused for industrial cleaning and degreasing applications (bio-detergents) and environmental treatments (bioremediation). Bio-Products offer to the market eco-efficient solutions and they are more effective, safer to use and involve environmental improvements.

The main advantage the company could offer to a potential partner is:

"Provide chemical and biological solutions to society, cleaner and safer every day"
The combination of Clean Technologies and Biotechnology along with a commitment to customer service enables us to be the best option on the market, providing innovative, effective, and efficient products that are environmentally friendly, maximize safety in use, and promote compliance with the rules and legal restrictions applicable to our customers.

We are looking for international alliances in order to offer and transfer to the international markets the benefices and add value that the bio-products developed by our company provide to the market. The homologation of the products (Eco-designed under ISO 14006 and/or European Eco-label) is a very interesting differentiating factor that will support the introduction of our products in the market because it is completely related with actual market trends that nowadays are demanding more sustainable products.

ZIGOR CORPORATION, S.A.

Portal de Gamarra, nº 28 • 01013 Vitoria - Basque Country (Spain) • www.zigor.com
Raquel Ferret • rferret@zigor.com • +34 945 214600 • +34 945 229600

Founded in Vitoria (Spain) in 1998, ZIGOR CORPORACIÓN has always followed a strategy of continuous growth and technological development. Its R&D Department designs innovative products, based on the latest technologies in power electronics. The developed products are for Telecom, Utilities, Railway, IT and Renewable markets.

Zigor outstanding developments for renewable sector are:

- On-Grid SUNZET inverters, designed to optimise the yield of PV plants, meet international regulations related to anti-islanding, reactive power and ride through and fulfil most European Grid Codes.
- The HITC (3-phase) & HIS Compact Hybrid Inverters. Designed for Off-grid applications, they optimise the use of available renewable sources. Their main feature: capable to accommodate the energy from various sources simultaneously while controlling all of them through a unique management system.


INVESTORS

Venture Capital in the Basque Country accounts for equity of more than 700 M€, with approximately 400 million available for investment. These resources are distributed among exclusively private, public-private and public entities, and cover the different stages of investment from seed capital to private equity.

PERSEO • Iberdrola´s Venture Capital Program

- Perseo venture capital program goal is to invest in early stage companies (typical investments in the range of 1-2M per deal).
- Program size: 6-9M /year.
- Main Technology Focus: Disruptive Energy Technology.
  - Renewable Energy: Solar, Wind, Marine, Biomass...
  - Energy Efficiency: Energy Management Systems, Green Mobility...
  - Other energy related technologies: CCS, Energy Storage...
- Geographical focus: worldwide (with special focus in Iberdrola´s priority markets).
- Usually co-investing with other corporate or VC funds.
- Supporting the technology development in the portfolio companies with Iberdrola´s expertise and network.
- Send investment proposals to perseo@iberdrola.es

Further information about the program in:

www.iberdrola.es

To channel its technological diversification strategy, Gamesa has a corporate venture capital fund -Gamesa Venture Capital-, through which it plans to invest up to 50 million euros through 2016 to buy stakes, initially minority shareholdings, in start-ups and growth ventures engaged in the development of technologies with promising potential for future growth. In return, Gamesa will offer the companies its market position, skill and experience in technology, manufacturing and finance and its local supply chain to achieve greater market competitiveness and, in consequence, higher financial and strategic returns. In the medium and long term, Gamesa will consider taking the companies over, either as new business lines or as sources of value via spin-offs on capital markets.

The company in the last year has made its first purchases as part of its venture capital strategy, buying 28.7% and 25%-percent stakes, respectively, in US-based companies SkyBuilt Power and WorldWater & Solar Technologies, both of which specialise in off-grid solutions. The third transaction is the adquisition of a 20% stake in N2S, specialised in energy efficiency.

www.gamesacorp.com

Seed Capital de Bizkaia is a Regional Council company affiliated to Biscay Regional Council´s Department of Economic Development and Innovation. It was created in late 1989 under the then European Community's Programme for the Promotion of Seed Capital Funds in Europe (Directorates General XVI and XXIII), with the aim of funding the development of innovative business projects at the start-up stage.

The mission is to promote and develop new and existing companies whose aim is to develop innovative projects, new products, markets or production processes, improved management, stability or continuity, vision for the future, the creation of stable jobs and the generation of wealth. Our involvement does not end at the provision of funds. Instead, the Managing Company ensures, through its follow-up process, that the necessary requirements are met to ensure that the investee company meets its goals.

It manages two Venture Capital Funds called: "Seed Capital de Bizkaia, F.C.R." and "Seed Capital Bizkaia Bi F.C.R
SEED CAPITAL DE BIZKAIA, VENTURE CAPITAL FUND, established in 1991 and initially endowed with 1.8 million euros, for the promotion and development of enterprises by taking a temporary stake in their capital, is open to any public or private investor who wishes to invest in it. It has invested 15 million euros since it was incorporated and currently has 3 million euros available for investment.
SEED BI CAPITAL DE BIZKAIA, VENTURE CAPITAL FUND, established in 2009, has an investment limit of 600,000 euros per project, and even up to 1 million euros in exceptional cases. It has 6 million euros available for investment.

www.seedcapitalbizkaia.com

ORZA AIE is a firm that invests in unlisted companies. Created in 2005, and owned by two pension funds, Geroa and Elkarkidetza, which hold 50% each, it invests in companies in the Basque Country and neighbouring provinces to enable effective management of its portfolio. Geroa and Elkarkidetza seek to boost manufacturing industry in the Basque Country by investing part of the pension funds obtained from workers and civil servants.

ORZA invests from €1.5 million to €7-8 million, executing larger investments in businesses with other investors. ORZA always acquires a significant minority equity position of under 50%. We participate in MBO operations, business succession processes, substitutions of minority shareholders, companies needing capital growth and start-up businesses, offering the possibility to go to consecutive fund requirements.

ORZA contributes with knowledge, contacts and relationships that create crucial synergies. We offer relations with banks, economic, legal and political institutions. Flexibility in divestment periods (longer permanence vocation than private equity firms), our rapid decision making, efficient investment analysis and active attendance on the Board of Directors makes us an advantageous investment partner.

www.orza.info

Talde is the pioneering private venture capital management group, with more than 30 years experience in value creation for small and medium-sized enterprises in which it takes a stake.

Talde has held stakes in more than 135 enterprises since 1977, involving investments in excess of 140 million euros. The average Investment per business and type of operation is as follows: MBOs, MBIs and others: from 6 to 12 million euros.

The Talde group manages resources valued at 165 million euros. The resources managed have multiplied fivefold in recent years, and important new financial and industrial partners have been incorporated.

Talde Gestión, SGECR, S.A. manages the following funds:
* Talde Capital FCR
* Talde Capital II FCR (backed by the European Community Employment and Growth Initiative through the European Investment Fund)
* Talde Promoción y Desarrollo, SCR, S.A.
* Sendogi Capital FCR

www.talde.com

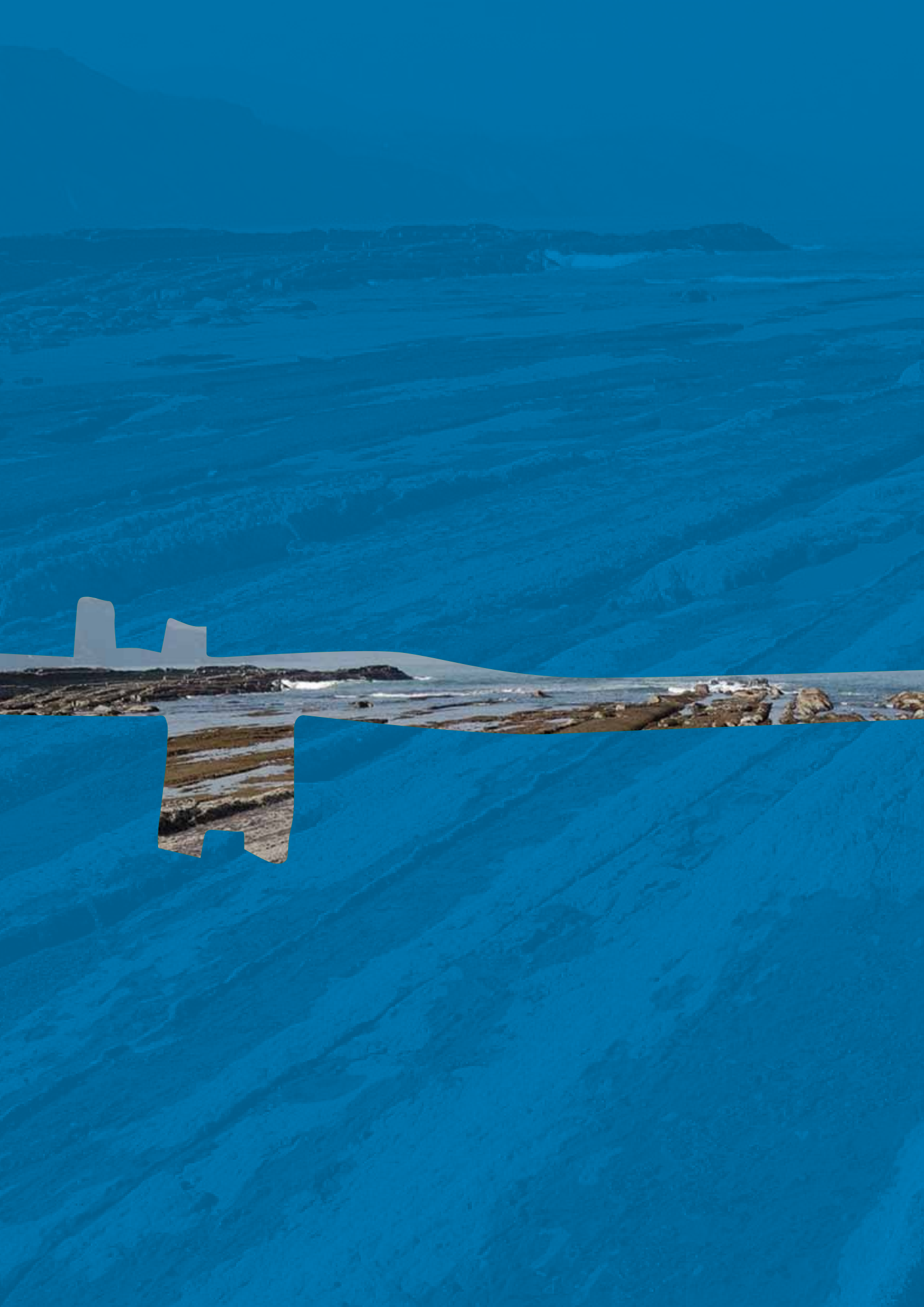
GESTIÓN DE CAPITAL RIESGO DEL PAÍS VASCO, SGECR, S.A.
EUSKAL HERRIKO ARRISKU-KAPITALAREN KUDEAKETA, AKEKS, S.A.

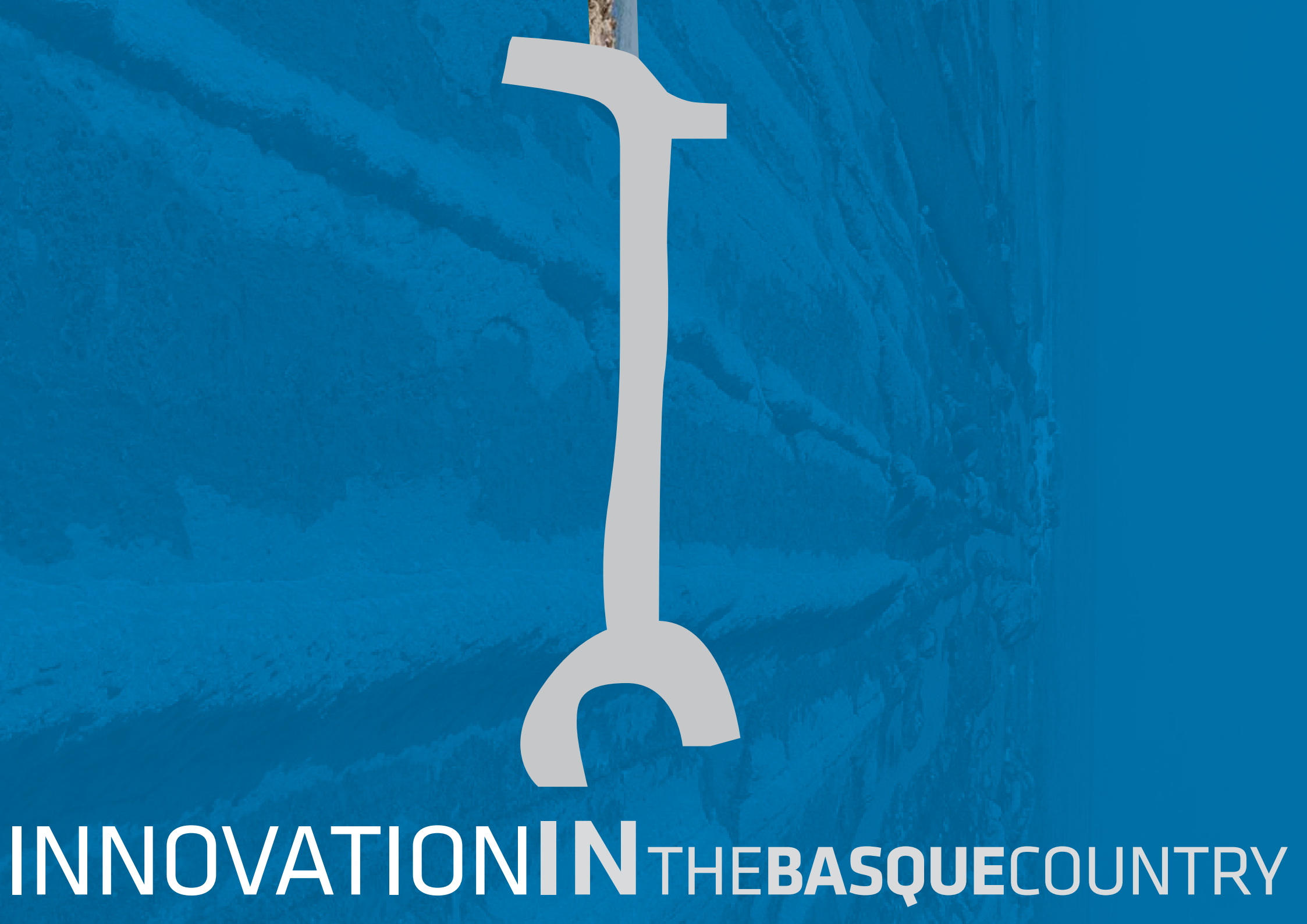
Gestión de Capital Riesgo del País Vasco SGECR, S.A. is a venture capital firm whose main shareholder is the Basque Country Regional Government. Nowadays Gestión de Capital Riesgo del País Vasco SGECR, S.A. manages more than 150 million euro and has a portfolio of more than 100 companies.

GCR invests in every stage of investment and in any type of companies. However it is strongly committed in financing innovative projects.

The venture capital fund it operates with for operations between €10M and €40M is EKARPEN.

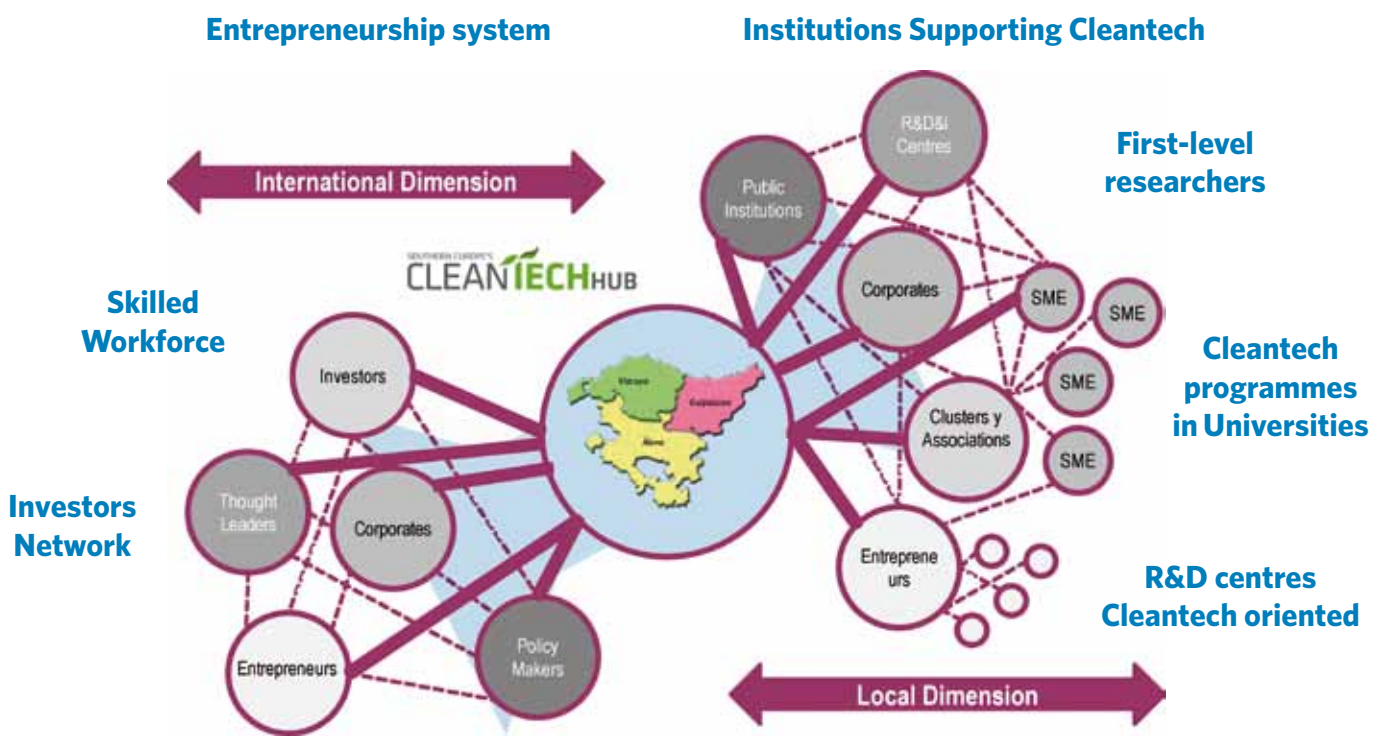
www.gestioncapitalriesgo.com




INNOVATION IN THE BASQUE COUNTRY

"Southern Europe's Cleantech Hub" Concept

The Basque Country can position itself like the region leading cleantech development, innovation and commercialisation in Southern Europe.



CLEANTECH**INNOVATION**ECOSYSTEM

BUSINESS ASSOCIATIONS & CLUSTERs

- Basque Business Confederation -Confebask
- Basque Energy Cluster
- Basque Country's Environmental Industry's Cluster Association - Aclima
- Basque Construction Cluster - Eraikune
- Basque Automotive Cluster - Acicae
- Machine Tool, Accessories, Component Parts and Tools Manufacturers' Association - AFM
- Cluster of Mobility and Logistics, MLC ITS
- Association of Electronic and Information Technologies in the Basque Country - GAIA
- Basque Aerospace Cluster - Hegan
- Basque Household Appliances Cluster - ACEDE
- Basque Paper Cluster
- Basque Life Sciences Cluster - Biobasque
- Basque Audio-visual Cluster - Eiken
- Port of Bilbao Cluster - Uniport Bilbao
- Basque Maritime Forum - Foro Marítimo
- Cener - National Renewable Energy Centre
- BEAZ
- CEDEMI
- CEIA
- Saiolan
- BIC Gipuzkoa Berrilan

BERCs (Basic Excellence Research Centres)

- Basque Centre for Climate Change - BC3
- Basque Center for Applied Mathematics - BCAM

CRC (Center for Cooperative Research)

- Energy Cooperative Research Centre - CIC energiGUNE
- Centre for Cooperative Research in Biomaterials - CIC biomaGUNE
- Nanoscience Cooperative Research center - CIC nanoGUNE
- Microtechnologies Cooperative Research Center - CIC microGUNE
- Center for Cooperative Research in Biosciences - CIC bioGUNE

UNIVERSITIES

University of the Basque Country
University of Mondragon
University of Deusto

Eco-innovation success **stories**

Goals

The study of Eco-innovation success stories seeks to contribute to the positioning of the Basque country as a reference in the field of eco-innovation

- By disseminating technological and non-technological innovation with a positive environmental impact developed by Basque companies and institutions
- By generating knowledge on eco-innovation through proven methodology
- By introducing eco-innovation in the classroom through the use of cases in teaching activity

Collaborating partners

innobasque – berrikuntzaren euskal agentzia / agencia vasca de la innovación

Universidad del País Vasco
Euskal Herriko Unibertsitatea
The University of the Basque Country

MONDRAGON UNIBERTSITATEA

Universidad de Deusto
Deustuko Unibertsitatea
Deusto

Eco-innovation focusing on urban solutions

1.
Co-creation of an innovative waste management in the Basque Country

CIE Automotive

EUSKO JAURLARITZA GOBIERNO VASCO

Ekonor

FCC

2.
Efficient and customer oriented ecodesign

EROSKI

3.
Co-innovating to make Smart Technologies become reality

ZIV

IBERDROLA

EVE Ente Vasco de la Energía

4.
New chemical products based on biotechnology

ABG biotech

5.
Sustainable Construction: new strategy for innovation

idom

6.
Sustainable urban mobility become to Green Capital

Vitoria-Gasteiz
CAPITAL DE VIDA

Founding **Members:**

About **Innobasque:**

Innobasque, the Basque Agency for Innovation, is a private, not-for-profit organisation made up of the agents in the Basque Science, Technology and Innovation Network, private companies, Basque public institutions, institutional representatives of Basque employers and workers, and a whole range of organisations linked to innovation, that number over 1000. Innobasque offers all these agents a powerful platform and a network for collaboration. Through them it sets out to promote and deploy innovation in Basque society, with initiatives that contribute towards generating the dynamics for transformation in Basque companies and organisations and in society as a whole, and spreading an image of the Basque Country as an innovative society and an advanced centre of R+D+i. Innobasque sits on the boards of directors and executive bodies of the Basque Council for Science, Technology and Innovation (CVTCI); The Basque Centre on Cognition, Brain and Language (BCBL), The Basque Centre for Applied Mathematics (BCAM), Orkestra (The Basque Institute for Competitiveness), the Advisory Board of the President of the Basque Autonomous Community, and i20 (ILSI, Institute for Large Scale Innovation, San Francisco).

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Organizations Index

Organizations Index

SOUTHERN EUROPE'S
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